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Mean Position for 1870.

Comparison Stars.		R.A.	P.
		h m s	° ′ ″
3,118 Arg. Z. + 31°	9, 5	17 48 37·31	58 32 45·3
1,601 W. xvii.	7, 8	17 50 42·25	71 39 8·3
33,103 Lat.	8	17 56 15·86	65 1 51·7
33,555 Lat.	8	18 7 47·69	64 23 37·9
34,322 Lat.	7½	18 26 0·28	67 6 19·8
896 W. xviii.	9	18 30 42·79	59 26 35·9
993 W. xviii.	9	18 33 39·29	63 41 25·0
34,510 Lat.	8½	18 30 27·23	64 44 6·8
3,224 Arg. Z. + 36°	9, 3	18 35 17·46	53 47 38·2
3,360 Arg. Z. + 26	9, 3	18 42 5·75	63 19 11·5
22 W. xix.	8	19 2 35·01	68 25 28·9
35,989 Lat.	6½	19 4 21 42	59 38 34·0
39,827 Lat.	6	20 32 13·92	95 22 59·3
42,973 Lat.	7	21 56 6·57	79 15 22·8
96 W. xxii.	8, 9	22 4 53·92	64 49 29·9
772 W. xxii.	8	22 33 42·78	51 55 40·1

Observations of Encke's Comet with the Transit Circle and the Great Equatoreal at the Royal Observatory, Greenwich.

(*Communicated by the Astronomer Royal.*)

1871.	G.M.T.	Observed R.A.	Correction to Mr. Hind's Ephemeris.	Observed N.P.D.	Correction to Mr. Hind's Ephemeris.	Observer.
	d h m s	h m s	s	° ′ ″	″	
Nov.	8 6 28 43	21 38 42·5	+ 11·0	..	..	J.C.
	6 28 48	21 38 47·1	+ 15·6	56 54 27·0	+ 49·0	P.
	9 6 15 7	21 29 0·9	+ 18·8	57 48 7·0	− 17·0	J.C.

The observations were made by Mr. Carpenter and Mr. Potts.

Note by Mr. Carpenter:—"Nov. 9. The comet was large and faint, the diameter of the brightest portion equal to one interval of the wires used in eye-and-ear observations (about 240″). It was somewhat fan-shaped, with no nucleus; the part observed being that which I judged the brightest. The low-power eyepiece (about 50) was used."

In the first observation, on November 8, the transit was observed over two of the vertical wires, and in the second observation over one only. On November 9 the transit was observed over six wires.

Mr. Carpenter further writes: "I observed this comet last night, Nov. 9, with the Great Equatoreal (as well as with the Transit Circle). The appearance was the same as on the pre-

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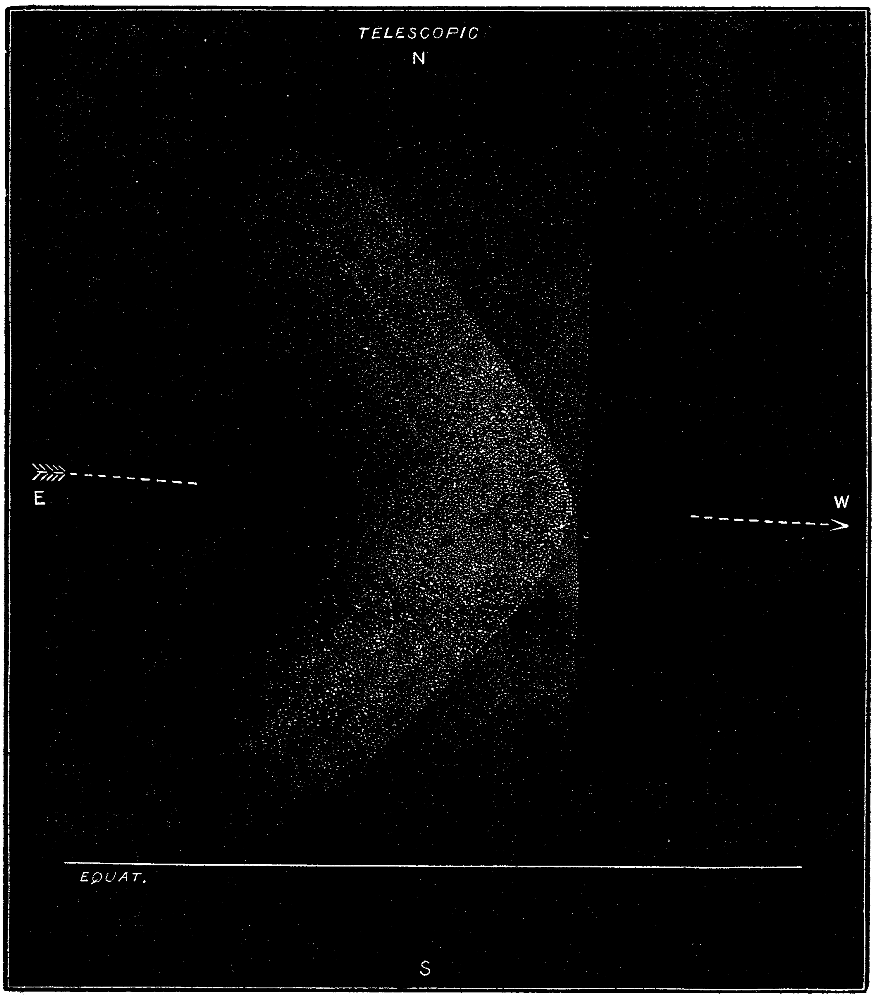
vious evening; but I was able to make out a considerable extension of the illumination beyond the bright fan-shaped condensation, but on one side (the spreading side) only. On the opposite side this diffused illumination appeared to be cut off nearly in a straight line immediately behind (following) the apex of the fan. (*See woodcut.*)



"The axis of the illuminated fan was inclined about 5° or 10° to the plane, the apparent west side (apex of the fan) dipping. The comet was easily seen in the finder of the Great Equatoreal."

1871, *Nov.* 10.

[The Astronomer Royal explained to the Meeting, by reference to a globe upon which the Sun and the Comet had been drawn in their proper positions, that the spreading side of the fan-shaped luminosity was turned almost directly towards the Sun.]

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